

We claim:

1. A composition comprising an active agent encapsulated in a mixture comprising at least one modified starch and at least one protein, the modified starch comprising a starch derivative containing a hydrophobic group or both a hydrophobic and a hydrophilic group which has been degraded by an exo-enzyme and the protein selection from the group consisting of caseins and soy proteins.
2. The composition of claim 1, wherein the starch is derivatized with a reagent selected from the group consisting of octenylsuccinic anhydride and dodecenylsuccinic anhydride.
3. The composition of claim 1, wherein the starch is degraded by an enzyme selected from the group consisting of β -amylase, glucoamylase, maltogenase, pullulanase, exo-alpha-1,4-glucosidase, exo-1,4-alpha-D-glucan maltotetrahydrolase, and exo-1,4-alpha-D glucan maltohexahydrolase.
4. The composition of claim 1, wherein the starch is derivatized with octenylsuccinic anhydride and is degraded by glucoamylase.
5. The composition of claim 1, wherein the protein is sodium caseinate.
6. The composition of claim 4, wherein the protein is sodium caseinate.
7. The composition of claim 1, wherein the protein is soy protein.
8. The composition of claim 4, wherein the protein is soy protein.
9. The composition of claim 1, wherein the active agent is an oxygen sensitive agent.

10. The composition of claim 1, 5, 6, 7 or 8 wherein the active agent is selected from the group consisting of unsaturated fatty acids, citrus oils, vitamins, tocopherols, tocotrienols, beta-carotene, marine oils, and omega-3 fatty acids.
- 5 11. The composition of claim 1, 5, 6, 7 or 8 wherein the active agent is selected from the group consisting of marine oils and omega-3 fatty acids.
12. The composition of claim 11, wherein the starch has a dextrose equivalence of from about 20 to about 80.
- 10 13. The composition of claim 11, wherein the starch has a viscosity of less than about 30 seconds as measured by the funnel method.
14. The composition of claim 11, wherein the ratio of starch to protein is in an amount of from about 30:70 to 90:10.
- 15 15. The composition of claim 11, wherein the ratio of starch to protein is in an amount of from about 40:60 to 80:20.
16. The composition of claim 15, wherein the active agent is present in an amount of from about 5 to 70% (wt/wt) based upon the weight of the starch, protein and active agent.
- 20 17. The composition of claim 15, wherein the active agent is present in an amount of from about 15 to 60% (wt/wt) based upon the weight of the starch, protein and active agent.

18. A method of making the composition of claim 1, 5, 6, 7 or 8 comprising
- a) mixing a protein and a modified starch in an aqueous medium at a temperature below that of the Maillard reaction to form
5 an encapsulating mixture,
 - b) adding an active agent to the encapsulating mixture to form a active agent/encapsulating mixture, and
 - c) homogenizing the active agent/encapsulating mixture to form an emulsion.
- 10 19. The method of claim 15, further comprising drying the emulsion.
20. A product comprising the composition of claims 1, 5, 6, 7 or 8 wherein the product is selected from the group consisting of food products, pharmaceutical products, personal care products, hair care products, paper products, animal care products, and household products.
- 15 21. The product of claim 20, wherein the product is selected from the group consisting of cereal, powdered drink mix, instant coffee, instant tea, powdered sauce mix, powdered gravy mix, instant soup, powdered dressing, intermediate moisture foods and bakery product.

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